

Abstract of the Invention

A vapor pressure equalizer system for reducing the pressure of a storage tank that contains volatile liquid or fuel. A conduit is connected to the storage tank that draws vapors present in the ullage of the storage tank into the conduit. The vapors are circulated through the conduit to cool the vapor and return the vapor to the storage tank. In this manner, the pressure of the storage tank is reduced since the vapors being returned are cooler and smaller in volume than when the vapors entered the conduit. The conduit may be an open system that circulates vapors, or may be a closed system that circulates a cooling media through a radiator in the ullage of the storage tank. An electronic controller controls the operation of the system according to measurements that indicate an overpressure condition or a likelihood of future over-pressurization.